Toward a National STI Policy

An Unfinished Work

By

Colonel Andrew A. Aines

(1913-1996)

Table of Contents

Chapter 1 –A Post World War II History (nearly 300 pages)

Section 1.1 A Legacy of Science Communications

Section 1.2 “Big” Science Arrives on the Scene

Section 1.3 Proliferation of Scientific and Technical Information and Data

Section 1.4 Information Technology Arrives with Hurricane Force

Section 1.5 Congress Discovers Scientific and Technical Information

Section 1.6 Executive Office of the President Takes Notice

Section 1.7 Professional Societies React to the Challenges

Section 1.8 Governments and International Organizations Enter the Picture

Section 1.9 Recognition of the Need for Studies of the Growing Scientific and Technical information Field

Section 1.10 More Responsive Scientific and Technical Information Programs for the Federal Agencies

Section 1.11 National Science Foundation Given a Key Role in Achieving National Progress

Section 1.12 Three National Libraries Play Integral Role

Section 1.13 Government Commissions and Advisory Groups

Section 1.14 Emergence of the U.S. Commercial Information Sector

Section 1.15 ?

Section 1.16 Fluctuating Interest of Scientists in Federal Scientific and Technical Information Affairs

Section 1.17 Explosive Growth of Databases and Networks and Their Augury

Section 1.18 Summary

Chapter 2 – (nearly 700 pages

Section 2.1 Federal Council for Science and Technology

Section 2.2 Genesis of the Committee on Scientific and Technical Information

Section 2.3 Changing Organization of COSATI to Meet New and Emerging Needs

Chapters 3-5 unwritten

Chapter 6 Quest for national STI Priorities and Policies

Section 6.1 Mandate to Reinvigorate The Federal STI Program

Section 6.2 We Must Amend the Law that Established OSTP

Section 6.3 Need to Create a Federal and National Policy

Section 6.4 Need to Re-Establish a Successor to COSATI

Section 6.5 Need to Bring Harmony and Cooperation Between and Among the Public and Private STI Sectors

Section 6.6 Need to Improve Substantially the Gathering and Analysis of the Vital STI produced in Other Countries

Section 6.7 Need to Upgrade the Management of Federal and national STI Programs

Section 6.8 Need to Provide Access to All Legitimate Users to All Legitimate Users in the Government and On a Need to Know Basis to Users in the Private Sector

Section 6.9 Need to Encourage all U.S. Scientists and Engineers to Participate in the Development of Federal and National STI Systems

Section 6.10 Need to Evolve a Federal and National STI Plan the Will Give the United States Clear Direction to the Year 2000 and Beyond

Chapter 7 Concluding Remarks and Epilogue

Some notes by Wm David Penniman on the planned book chapters

A Brief Look at the Unfinished Work as Chronicled by Andrew Aines

The outline for his book as well as notes on actual or intended content are included here for his "unfinished work". This brief outline of the final efforts of Andy to grapple with the problems and opportunities of the ready access to scientific and technical information reveals just how important he saw the role that technology transfer would play in an increasingly competitive world

Chapter 1 – A Post World War II History (of Federal scientific and technical information)

This chapter of 290 typewritten pages was completed in October of 1983 and had eighteen sections but with three that constituted the majority of content. These three sections covered the role of Congress (80 pages), key studies and reports (the longest section with 120 pages) and the involvement of U.S. scientists in science communications (21 pages). The remaining sections are much briefer and cover such areas as professional societies, international organizations, the National Science Foundation, and the emergence of databases and networks for example. Note that this latter section is an interesting perspective of that time on what has become an everyday commodity.

Note: Despite our best efforts to retrieve all draft material from the archives at the University of Maryland, there are some gaps, even in this "completed" chapter. The major sections, however, are intact.

Chapter 2

This chapter, of almost 700 pages, is by far the most extensive evidence of Andy's devotion to the cause of "frictionless access" to federally funded scientific and technical information. It traces in detail the creation and various transformations of the Committee on Scientific and Technical Information (COSATI).

Chapter 3 (not written)

This unwritten chapter was to cover noteworthy scientific and technical information programs of the federal agencies and departments (Andy identified 14 in his detailed outline for this chapter). In addition, he planned to cover such topics as data base development and networking, cooperative programs with professional societies, use of the privates sector and other related topics.

Chapter 4 (not written)

This chapter, existing in outline form only, was to cover international organizations and movements and the participation of our federal government agencies in such activities. This was to include discussion of OECD, UNESCO, bilateral agreements, international networking, challenges regarding developing countries and non-governmental bodies for example.

Chapter 5 (not written)

The last of the unwritten chapters was to cover the "unstable relationship between managers of public and private S&T information programs" and the various studies addressing this issue. Identified to include in this chapter were studies such as the Hayes or NCLIS study and various OSTP studies.

Chapter 6

This chapter of 23 pages was completed after Andy's surgery and emphasized his plea for and recognition of the need for national priorities and policies around scientific and technical information transfer. The plea continues in the following closing chapter.

Chapter 7

Simply labelled Concluding Comments this brief chapter of 5 pages begins with a quote from Peter Drucker: "I see government as obese and muscle bound and having lost the capacity to perform …" While Andy felt there was some truth in Drucker's statement he countered with the view that we could overcome negative aspects "with a program to skillfully use the tools of the Information Age to solve our problems…"

Acknowledgements

The recovery and assembly of this manuscript would have not been possible without the great assistance from many people including the following:

Members of the Hornbake Library at the University of Maryland

Elizabeth A. Novara, Curator, Historical manuscripts

Joanne Archer, Special Collections Librarian

Lauren Brown, Special Collections

Porter Osen, technical assistance on data recovery and processing

My wife, Charlotte, who helped me go through 117 boxes of archival material taken from AndrewAines office after his death. This material had not been inventoried and she was a driving force behind creating a summary of all the material in the boxes, not just the material we were seeking.

Elliot Siegel, colleague and friend, who encouraged me to keep after this project despite the years elapsed since I first conceived of it. Without his help and prodding, it might have stayed dormant.

Robert W. Aines, the son of Andy, who generously agreed to access to and use of his father's personal papers in the Hornbake collection.

And, finally, to Andy, for his unwavering commitment to the causes he so eloquently spelled out in his "unfinished business".

W. David Penniman, PhD (retired information scientist)